

IAP5 Rec'd PCT/PTO 31 AUG 2006

77460.ST25.txt  
SEQUENCE LISTING

<110> University of Georgia Research Foundation, Inc  
The Ohio State University  
Maier, Robert J  
Gunn, John S

<120> Hydrogenase Deficient Bacterial Strains

<130> 31725-77460

<150> 60/549,306  
<151> 2004-03-02

<150> 60/604,846  
<151> 2004-08-26

<160> 21

<170> PatentIn version 3.3

<210> 1  
<211> 51  
<212> DNA  
<213> Samonella typhimurium

<400> 1  
tagtggtttg ggataaacgt tatgcaaaca gtgtaggctg gagctgcttc g  
51

<210> 2  
<211> 50  
<212> DNA  
<213> Samonella typhimurium

<400> 2  
attgagacct ccgaatcgtc gtcacgtac catatgaata tcctccttag  
50

<210> 3  
<211> 51  
<212> DNA  
<213> Samonella typhimurium

<400> 3  
tcgtaacgga ataactataa aatgtgtgca gtgtaggctg gagctgcttc g  
51

<210> 4  
<211> 50  
<212> DNA  
<213> Samonella typhimurium

<400> 4  
cccctaagac taatatccgc attacaaaac catatgaata tcctccttag  
50

<210> 5  
<211> 51  
<212> DNA  
<213> Samonella typhimurium

<400> 5

aaaggagaaa aaatacgcggt tatgaataac gtgtaggctg gagctgcttc g  
51

<210> 6  
<211> 50  
<212> DNA  
<213> Samonella typhimurium

<400> 6  
atcgttcitt tccttaacgc ttagcggtacc catatgaata tcctccttag  
50

<210> 7  
<211> 232  
<212> DNA  
<213> Samonella typhimurium

<400> 7  
gcgctcgcaa tgatcaaag atcacgattc gccatatcgc caagaagttc cattcccgcc  
60

acaatacgca ccccgatggc ttcacgggtc agcaaaatat tgccgacccc taagactaat  
120

atccgcatta caaaactgca caaagcttca tgaaatcacg acgggttaatg ccgtgagaag  
180

tgatgagagt attatctcca gtcattttat agttattccg ttacgaagac ct  
232

<210> 8  
<211> 518  
<212> DNA  
<213> Samonella typhimurium

<400> 8  
gtactcattg ccgacacatg cccagtaaag acgaaacagc agcgcgacag taaaaatata  
60

cgccgtggta aaatggatca gtcgtatcca gcccatcaa aacataaagg tcgcttcacc  
120

ttgaatcgat ggcagggggc ggccaatgaa atatcctgta acagccagga cgacaatgga  
180

taacgccgtg atccagtgcc ataaacggac cggcgcttca tagatatagt acccctggct  
240

ggttatttct ttgagatgca ttgagacctc cgaatcgctg tcatcggtact gtttgcataa  
300

cgtttatccc aaaccactat agttagtgtg ggcacatat gttgcatttc ttgtctttct  
360

caacgtgttt tagtagcaat tatgtttcta attcgtaaca actgattaca tgtgtgctac  
420

tcacattact caaaaacata aattaattta atgttattgg tgatgttgag taaatatagc  
480

gttgatgatgg catctcttaa tgttgataag aaaccgtg  
518

<210> 9  
 <211> 333  
 <212> DNA  
 <213> Samonella typhimurium

<400> 9  
 cttatcggtta atccgatacg cttttttcac attatttctg gcggtatacg ccggtgcaaa  
 60  
 gtgaatcggg ctcgtttccg cgctcgcgcg taacacaatg atttaccttg ctggcggaac  
 120  
 gtcaacggac ccgcaaaagc gccttatgcc cctggcgag cgtggtgcaa aaaggagaaa  
 180  
 aaatacgcgt tatgaataac ggtacgctaa gcgttaagga aaagaacgat gactggaaag  
 240  
 ctatctccac gcgtcgggga ggcgcgtgat actgccgtca gccactatgt gtttgaagcg  
 300  
 ccggtacgcc tgtggcactg gctaacggtg gcc  
 333

<210> 10  
 <211> 19  
 <212> DNA  
 <213> Samonella typhimurium

<400> 10  
 cacggtttct tatcaacat  
 19

<210> 11  
 <211> 20  
 <212> DNA  
 <213> Samonella typhimurium

<400> 11  
 gtactcattg ccgacacatg  
 20

<210> 12  
 <211> 20  
 <212> DNA  
 <213> Samonella typhimurium

<400> 12  
 ccgggatggc gggtcgcttc  
 20

<210> 13  
 <211> 20  
 <212> DNA  
 <213> Samonella typhimurium

<400> 13  
 gcgtcggcaa tgatcaaag  
 20

<210> 14  
 <211> 21

<212> DNA  
<213> *Samonella typhimurium*

<400> 14  
cttatcgta atccgatacg c  
21

<210> 15  
<211> 20  
<212> DNA  
<213> *Samonella typhimurium*

<400> 15  
ggccaccgtt agccagtgcc  
20

<210> 16  
<211> 24  
<212> DNA  
<213> *Samonella typhimurium*

<400> 16  
gctctagaaa aaatacgct tatg  
24

<210> 17  
<211> 25  
<212> DNA  
<213> *Samonella typhimurium*

<400> 17  
cccaagctta gcgtacctgg acggc  
25

<210> 18  
<211> 24  
<212> DNA  
<213> *Helicobacter hepaticus*

<400> 18  
ttcgtggtat gaggataatc agcc  
24

<210> 19  
<211> 24  
<212> DNA  
<213> *Helicobacter hepaticus*

<400> 19  
aataaagcac aactcccgtg agag  
24

<210> 20  
<211> 23  
<212> DNA  
<213> *Helicobacter hepaticus*

<400> 20  
ggctagatac aagaatcgct aat  
23

77460.ST25.txt

<210> 21  
<211> 23  
<212> DNA  
<213> Helicobacter hepaticus

<400> 21  
ctacctacta ccgcataatc aag  
23